

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
ABERDEEN, IDAHO

NOTICE OF RELEASE OF NEBRASKA SEDGE
FOR LAND RESOURCE REGION D NORTH
SELECTED CLASS OF NATURAL GERMPLASM

The Natural Resources Conservation Service, U.S. Department of Agriculture announces the release of a selected ecotype of Nebraska Sedge (*Carex nebrascensis*) for Land Resource Region (LRR) D North.

As a Selected release, this plant will not be given a name, but will be referred to as the Modoc selection of Nebraska Sedge to document its original collection location. The Modoc selection is released as a Selected Class of certified seed (natural track).

This alternative release procedure is justified because existing commercial sources of Nebraska Sedge are inadequate, propagation material of specific ecotypes is needed for ecosystem restoration, enhancement, and construction of wetlands, potential for immediate use is high, and commercial potential beyond specific wetland uses is probably limited. No commercial cultivars of Nebraska Sedge have been released at this time.

Species:	<i>Carex nebrascensis</i> Dewey
Common Name:	Nebraska Sedge
Plant Symbol:	CANE2
Accession Number:	9057612

Source: Modoc National Wildlife Refuge, near the town of Alturas, Modoc County, California.

Collection area Information: Stands are located within Modoc NWR. Very little variability among CANE2 stands was observed within the boundaries of the Refuge. This variability was judged to be inconsequential. Therefore, any collection of CANE2 located within the Refuge boundary would be considered a constituent of this Selected Release. Elevation is approximately 4400 feet. The soils are mostly poorly drained calcareous loams.

Method of Selection: From a Nebraska Sedge collection found in Land Resource (LRR) Region D North, which includes Major Land Resource Regions (MLRAs) 21, 23, 24, 25, 26, and 27.

A total of 22 CANE2 collections from the Aberdeen PMC Service Area were evaluated from 1991 to 1995. All collections were evaluated for survival, vigor, overall growth and spread, seed production, and above ground biomass production. Of these 22 collections, three were from LRR D North. The Modoc collection outperformed all other collections from D North. It was also the best overall for all CANE2 collections in the Service Area. The Modoc selection of Nebraska Sedge was selected for its rapid spreading from rhizomes, shoot density per unit area, vigor, height, seed production, and above ground biomass production. This accession needs special seed treatment and stratification procedures to achieve acceptable germination rates.

Description: *Carex nebrascensis* is a perennial, rhizomatous, wetland obligate. Stems are upright, triangular, and grow up to 3 feet tall. The leaves are elongated, alternate, longer or shorter than the stem, up to 1/2 inch wide, and often with a bluish tinge. The flowers are borne in spikes. Male and female flowers are usually in separate spikes on the same plant. One or two male spikes are found above the female spikes, are narrowly cylindrical, and up to 2 inches long.

Female spikes number from 2 to 5, are up to 3 inches long, and the lowest spike is subtended by a leafy bract.

Anticipated Conservation Use: The potential uses of the Modoc selection of *Carex nebrascensis* include erosion control, Constructed Wetland System applications, wildlife food/cover, wetland creations and restorations, and for increasing plant diversity in wetland and riparian communities. Its tendency to spread rhizomatously makes the Modoc selection an excellent plant for soil stabilization in sites which are saturated up to 2 or 3 inches of standing water. The rhizomes also form a matrix for many beneficial bacteria making this plant an excellent choice for wastewater treatment.

Potential Area of Adaptation: *Carex nebrascensis* is an obligate wetland plant and is found throughout the intermountain west. It commonly inhabits poorly drained soils which are saturated or have up to 2 or 3 inches of standing water. It will tolerate long periods of inundation. The Modoc selection would be an excellent choice for use throughout the ecoregion defined as LRR D North.

Seed Maintenance: Breeders seed will NOT be maintained by the USDA-NRCS Plant Materials Center. To make collections of the Modoc selection of Nebraska Sedge, contact the Refuge Manager, Modoc National Wildlife Refuge, U.S. Fish and Wildlife Service, P.O. Box 1610, Alturas, CA 96101, (916) 233-3572.

Signature sheet for release of a selected class of:

Modoc Selection of Nebraska Sedge (*Carex nebrascensis*) for Land Resource Region (LRR) B East from Modoc National Wildlife Refuge, near the town of Alturas, Modoc County, California.

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Date

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